

Type	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS 684	702/189.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:02	
2	BRS 3763	324/66, 67, 73.1, 232, 233, 326 -329, 335.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:22	
3	BRS 2378	455/103, 107, 108, 110, 113, 11 5.1, 115.3, 118, 121.ccls.ccl s.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:23	
4	BRS 124	379/25.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:04	
5	BRS 2	"20050156776"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:04	
6	BRS 2	"20020196177"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:04	

Type	Hits	Search Text	DBs	Time Stamp	Comments
7	IS&R 2	("6751553") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:16	
8	IS&R 2	("6529006") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:05	
9	IS&R 2	("6396433") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:05	
10	BRS 6	"6751553".uref.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:18	
11	BRS 1	"6751553".PN.	USPAT; USOCR	2005/12/20 09:18	
12	BRS 1	"6700526".PN.	USPAT; USOCR	2005/12/20 09:18	
13	BRS 3	"6529006".uref.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:20	

Type	Hits	Search Text	DBs	Time Stamp	Comments
14	BRS 3	"6396433".uref.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:20	
15	BRS 1396	signal\$1 with direction\$1 and first with second with phase\$2 and phase-locked with loop	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:30	
16	BRS 18	signal\$1 with direction\$1 with conductors\$1 and first with second with phase\$2 and phase-locked with loop	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 10:14	
17	BRS 1	signal\$1 with direction\$1 with conductor\$1 same first with second with phase\$2 and phase-locked with loop	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 09:32	
18	BRS 1	determin\$3 with signal\$1 with direction\$1 with conductor\$1 and first with second with phase\$2 and phase-locked with loop	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 09:32	
19	BRS 18	signal\$1 with direction\$1 with conductor\$1 and first with second with phase\$2 and phase-locked with loop	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:35	

Type	Hits	Search Text	DBs	Time Stamp	Comments
20	BRS 10	S214 or S215 or S216 or S217 or S218	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:12	
21	BRS 2	(S214 or S215 or S216 or S217 or S218) and signal\$1 with direction\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 09:48	
22	BRS 36	signal\$1 with direction\$1 with conductor\$1 and first with second with phase\$2 and (phase adj locked or phase-locked) with loop\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 10:15	
23	BRS 12	signal\$1 with direction\$1 with conductor\$1 and first with second with (phase adj locked or phase-locked) with loop\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 10:16	
24	BRS 10	signal\$1 with direction\$1 with conductor\$1 and digit\$4 with (phase adj locked or phase-locked) with loop\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 10:16	

Type	Hits	Search Text	DBs	Time Stamp	Comments
25	BRS 5	signals\$1 with directions\$1 with conductor\$1 and digit\$4 with (phase adj locked or phase-locked) with loop\$3 with frequenc\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 10:18	
26	BRS 15	signals\$1 with directions\$1 with conductor\$1 and digit\$4 with ((phase adj locked with loop\$1) or (phase-locked with loop\$1) or PLL) with frequenc\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 10:21	
27	BRS 15	signals\$1 with directions\$1 with conductor\$1 and digit\$4 with ((phase adj locked with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 10:24	

Type	Hits	Search Text	DBs	Time Stamp	Comments
28	6	signal\$1 with direction\$1 with conductor\$1 and digit\$4 same (two or (first same second)) with ((phase adj locked with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 10:26	
29	2	signal\$1 with direction\$1 with conductor\$1 and digit\$4 same (two or (first same second)) with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 10:27	
30	14	signal\$1 with direction\$1 with conductor\$1 and digit\$4 same ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 10:31	

Type	Hits	Search Text	DBs	Time Stamp	Comments
31	BRS 10	signals\$1 with direction\$1 with conductor\$1 and digit\$4 same ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3 and receiv\$3 with digit\$4 with signal\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:02	
32	BRS 1	(signals\$1 with direction\$1).ti. and signal\$1 with direction\$1 with conductor\$1 and digit\$4 same ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3 and receiv\$3 with digit\$4 with signal\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:04	

Type	Hits	Search Text	DBs	Time Stamp	Comments
33	BRS 14	(pipes\$1 or lines\$1 or cables\$1) with (direct\$4 or locat\$3) with conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPPLL) with frequenc\$3 and receiv\$3 with digit\$4 with signal\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:05	
34	BRS 23	(pipes\$1 or lines\$1 or cables\$1) with (direct\$4 or locat\$3) with conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPPLL) with frequenc\$3 and receiv\$3 with digit\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:16	

Type	Hits	Search Text	DBs	Time Stamp	Comments
35	BRS 29	(pipe\$1 or line\$1 or cable\$1 or signal\$1) with (direct\$4 or locat\$3) with conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3 and receiv\$3 with digit\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:17	
36	BRS 40	(pipe\$1 or line\$1 or cable\$1 or signal\$1) with (direct\$4 or locat\$3) same conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3 and receiv\$3 with digit\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:17	

Type	Hits	Search Text	DBs	Time Stamp	Comments
37	5	determin\$3 with (pipe\$1 or line\$1 or cable\$1 or signal\$1) with (direct\$4 or locat\$3) same conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3 and receiv\$3 with digits\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:22	
38	40	(pipe\$1 or line\$1 or cable\$1 or signal\$1) with (direct\$4 or locat\$3) same conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3 and receiv\$3 with digits\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:27	

Type	Hits	Search Text	DBs	Time Stamp	Comments
39	BRS 21	(pipe\$1 or line\$1 or cable\$1 or signal\$1) with (direction\$1 or locat\$3) same conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) with frequenc\$3 and receiv\$3 with digit\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:28	
40	BRS 2	(pipe\$1 or line\$1 or cable\$1 or signal\$1) with (direction\$1 or locat\$3) with conductor\$1 with first with second with frequenc\$3 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:29	

Type	Hits	Search Text	DBs	Time Stamp	Comments
41	2	(pipes\$1 or lines\$1 or cables\$1 or signals\$1) with (directions\$1 or locat\$3) with conductor\$1 with first with second with frequen\$3 and digit\$4 same ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:30	
42	8	(pipes\$1 or lines\$1 or cables\$1 or signals\$1) with (directions\$1 or locat\$3) with conductor\$1 with first with second with frequen\$3 and ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:33	

Type	Hits	Search Text	DBs	Time Stamp	Comments
43	BRS 93	digital\$2 same (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) and conductor\$1 and ((first with second) or parallel or two or pluralit\$3) with (((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:37	
44	BRS 5	digital\$2 same (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) same conductor\$1 and ((first with second) or parallel or two or pluralit\$3) with (((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:37	

Type	Hits	Search Text	DBs	Time Stamp	Comments
45	BRS 8	digital\$2 same (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) same ((first with second) or parallel or two or pluralit\$3) with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL) and conductors\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:38	
46	BRS 43	digital\$2 same (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) same ((first with second) or parallel or two or pluralit\$3) with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:48	

Type	Hits	Search Text	DBs	Time Stamp	Comments
47	BRS 137	digital\$2 and (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) same ((first with second) or parallel or two or pluralit\$3) with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:49	
48	BRS 2	digital\$2 and (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) with conductor\$1 same ((first with second) or parallel or two or pluralit\$3) with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:48	
49	BRS 961	digital\$2 and (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) same ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:49	

Type	Hits	Search Text	DBs	Time Stamp	Comments
50	BRS 4	digital\$2 and (detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) with conductor\$1 same ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 11:50	
51	BRS 25	(detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) with conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:39	
52	BRS 25	(detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) with conductor\$1 and ((digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL)) or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:26	

Type	Hits	Search Text	DBs	Time Stamp	Comments
53	BRS 4	(detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) same conductor\$1 same ((digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL)) or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:24	
54	BRS 1	(detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) with conductor\$1 same ((digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL)) or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:24	
55	BRS 2	(detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) with conductor\$1 and first with second with ((digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL)) or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:25	

Type	Hits	Search Text	DBs	Time Stamp	Comments
56	BRS 20	(detect\$3 or determin\$3 or monitor\$3) with (line\$1 or cable\$1 or pipe\$1 or wire\$1) with (direction\$1 or locat\$3) with conductor\$1 and ((digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL) or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:27	
57	BRS 4	(detect\$3 or determin\$3 or monitor\$3) with (direction\$1 or locat\$3) with conductor\$1 and digit\$4 same (two or parallel or pluralit\$3) with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:40	
58	IS&R 2	("4677663") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 12:45	

Type	Hits	Search Text	DBs	Time Stamp	Comments
59	IS&R 2	("4455654") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 13:25	
60	BRS 2	"20050156776"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:13	
61	BRS 2	"20020196177"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:13	
62	IS&R 2	("6751553") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:13	
63	IS&R 2	("6529006") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:13	
64	IS&R 2	("6396433") .PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:13	

Type	Hits	Search Text	DBs	Time Stamp	Comments
65	8	S271 or S272 or S273 or S274 or S275 and locat\$3 with conductor\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:13	
66	3	(S271 or S272 or S273 or S274 or S275) and locat\$3 with conductor\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:13	
67	6890	702/189.cc1s. or 324/66,67,73.1,232,233,326 -329,335.cc1s. or 455/103,107,108,110,113,11 5.1,115.3,118,121.cc1s.cc1s. or 379/25.cc1s.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB	2005/12/20 15:24	

Type	Hits	Search Text	DBs	Time Stamp	Comments
68	7	(702/189.cc1s. or 324/66, 67, 73.1, 232, 233, 326 -329, 335.cc1s. or 455/103, 107, 108, 110, 113, 11 5.1, 115.3, 118, 121.cc1s.cc1 s. or 379/25.cc1s.) and (detect\$3 or determin\$3 or monitor\$3) and (direction\$1 or locat\$3) with conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 15:25	
69	9	(702/189.cc1s. or 324/66, 67, 73.1, 232, 233, 326 -329, 335.cc1s. or 455/103, 107, 108, 110, 113, 11 5.1, 115.3, 118, 121.cc1s.cc1 s. or 379/25.cc1s.) and (direction\$1 or locat\$3) with conductor\$1 and digit\$4 with ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 15:25	

Type	Hits	Search Text	DBs	Time Stamp	Comments
70	8	(702/189.cc1s· or 324/66, 67, 73.1, 232, 233, 326 -329, 335.cc1s· or 455/103, 107, 108, 110, 113, 11 5.1, 115.3, 118, 121.cc1s.cc1 s. or 379/25.cc1s.) and line\$1 with locator\$1 and ((phase adj locked) with loop\$1) or (phase-locked with loop\$1) or PLL or DPLL)	US-PPGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 15:25	
71	80	(702/189.cc1s· or 324/66, 67, 73.1, 232, 233, 326 -329, 335.cc1s· or 455/103, 107, 108, 110, 113, 11 5.1, 115.3, 118, 121.cc1s.cc1 s. or 379/25.cc1s.) and line\$1 with locator\$1	US-PPGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 15:26	
72	167	(702/189.cc1s· or 324/66, 67, 73.1, 232, 233, 326 -329, 335.cc1s· or 455/103, 107, 108, 110, 113, 11 5.1, 115.3, 118, 121.cc1s.cc1 s. or 379/25.cc1s.) and (cable\$1 or pipe\$1 or line\$1) with locator\$1	US-PPGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2005/12/20 15:26	

Type	Hits	Search Text	DBs	Time Stamp	Comments
73	BRS 38	(702/189.ccls · or 324/66, 67, 73 · 1, 232, 233, 326 -329, 335.ccls · or 455/103, 107, 108, 110, 113, 11 5.1, 115 · 3, 118, 121.ccls.ccl s · or 379/25.ccls.) and (cable\$1 or pipe\$1 or line\$1) with locator\$1	US-PGPUB	2005/12/20 15:27	

Retrieval 1 Classif	Current XRef	Current OR	Title	Page s	Issue Date	Document ID	U	1
324/326; 324/67	324/326	324/67	Method for decoupling interference due to bleedover in metallic pipe and cable locators	20	20051110	US 2005024833 3 A1	1	
324/326	324/326	324/326	Bore location system	28	20051103	US 2005024281 8 A1	2	
324/326	324/326	324/326	Flux plane locating in an underground drilling system	17	20051027	US 2005023706 2 A1	3	
324/326	324/326	324/326	BORING TOOL TRACKING/GUIDING SYSTEM AND METHOD WITH UNCONSTRAINED TARGET LOCATION GEOMETRY	17	20050929	US 2005021251 9 A1	4	
116/173; 116/278; 324/326; 340/825.4 9	324/326	324/326	Surface tracker	10	20050915	US 2005020048 4 A1	5	

U	1	Document ID	Issue Date	Page s	Title	Current OR	Current XRef	Retrieval Classif
		US 2005015992	20050721	23	Method and apparatus for digital detection of electronic markers using frequency adaptation	702/189		702/189
		US 2005015660	20050721	37	Single and multi-trace omnidirectional sonde and line locators and transmitter used therewith	324/329	342/22	324/329
		US 2005009687	20050505	24	Method and apparatus for digital detection of electromagnetic signal strength and signal direction in metallic pipes and cables	702/189		702/189
8	X	US 2005008306	20050421	15	BORING TOOL TRACKING/GUIDING SYSTEM AND METHOD WITH UNCONSTRAINED TARGET LOCATION GEOMETRY	324/326		324/326
9		US 2005008306	20050421	15				

U	1	Document ID	Issue Date	Page s	Title	Current OR	Current XRef	Retrieval Classif
		US 2005007331 3 A1	20050407 23		Position and orientation locator/monitor	324/326		324/326
10		US 2005006803 5 A1	20050331 39		Flux orientation locating in a drilling system	324/326		324/326
11	X	US 200500160 7 A1	20050106 28		Multi-test circuit interrupter locator and circuit interrupter tester	324/67		324/67
12	X	US 2004022751 7 A1	20041118 18		System and method for locating underground utilities carrying passive signals	324/326	324/67	324/326; 324/67
13	X	US 2004019604 4 A1	20041007 17		Flux plane locating in an underground drilling system	324/326	702/150	324/329
14	X	US 2004017416 8 A1	20040909 27		Locating arrangement and method using boring tool and cable locating signals	324/326		324/326; 324/329
15	X	US 2004016474 0 A1	20040826 29		Bore location system	324/326	324/345	324/326
16	X	US 2004016474 0 A1	20040826 29					

U	1	Document ID	Issue Date	Page s	Title	Current OR	Current XRef	Retrieval Classif
		US 2004014081	20040722	21	Position and orientation locator/monitor	324/326	324/329	324/326; 324/329
17	X	0 A1						
18	X	US 2004014080	20040722	39	Flux orientation locating in a drilling system	324/326	175/45; 324/329	324/326; 324/329
		9 A1						
19	X	US 2004007555	20040422	8	Failed filter arrest indicator and method for use in multiple arrester location	340/551	324/326	324/326
		6 A1						
20	X	US 2004007039	20040415	18	Omnidirectional sonde and line locator	324/326	340/690; 340/854.1	324/326
		9 A1						
21	X	US 2004000447	20040108	13	Pipeline mapping and interrupter therefor	324/326	324/529; 324/67	324/326; 324/67
		9 A1						
22	X	US 2003019750	20031023	28	Bore location system	324/326	324/345	324/326
		9 A1						
23	X	US 2003018430	20031002	9	underground locator with a laser marking device.	324/326		324/326
		0 A1						
24	X	US 2003015592	20030821	12	ELECTRONIC MARKER LOCATOR SYSTEM AND METHOD	324/326	324/76.77	324/326
		2 A1						

U	1	Document ID	Issue Date	Page s	Title	Current OR	Current XRef	Retrieval Classif
					Boring tool tracking/guiding system and method with unconstrained target location geometry	324/326		324/326
25	X	US 2003010286 8 A1	20030605	25	Orientation sensor arrangement and method for use in a system for monitoring the orientation of an underground boring tool	324/326	175/45; 324/329	324/326; 324/329
26	X	US 2003007610 6 A1	20030424	24	Locating arrangement and method using boring tool and cable locating signals	324/326		324/326
27	X	US 2003007162 5 A1	20030417	31	Flux plane locating in an underground drilling system	324/326	175/45; 702/9	324/326
28	X	US 2003005268 3 A1	20030320		Flux orientation locating in a drilling system	324/326	324/323	324/326
29	X	US 2003001137 0 A1	20030116	41		324/326		324/326

U	1	Document ID	Issue Date	Page s	Title	Current OR	Current XRef	Retrieval Classif 1
		US 2003000157	20030102	15	Method for induced-impedance isolation using magnetic induction	324/326		324/326
30	X	US 2003000157	20030102	15	Cable location system using magnetic induction	324/67	324/326	324/326; 324/67
31	X	US 2003000155	20030102	14	Boring technique using locate point measurements for boring tool depth prediction	324/326		324/326
32	X	US 2002014042	20021003	17	Conductor tracing system	324/326		324/326
33	X	US 2002007500	20020620		Multi-axis locator for detection of buried targets	324/326		324/326
34	X	US 2002007500	20020620		Detecting underground conductors	324/326		324/326
35	X	US 2002004770	20020425		Locating system for identifying and locating subterranean optical cables	324/326		324/326
36	X	US 2002003436	20020321	8		385/100	324/67	324/67
		US 5 A1						

U	1	Document ID	Issue Date	Page s	Title	Current OR	Current XRef	Retrieval Classif
37	X	US 2002003047	20020314	6 A1	Multi-test circuit breaker locator	324/67		324/67
38	X	US 2001004307	20011122	1 A1	Closure guard with electronic marker	324/326	324/67	324/326; 324/67